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EXAMINER	
GILLESPIE, BENJAMIN	

ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/567,451	BLEUEL ET AL.	
	Examiner	Art Unit	
	BENJAMIN J. GILLESPIE	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 April 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 10-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 10-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/6/2009 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 6-8, 10-11, and 15-21 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for organic solvent or polyether alcohol, does not reasonably provide enablement for any solvent as presently recited in claims 1, 6-8, 10-11, and 15-21. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

3. For example Claim 1 states: "A process for preparing autocatalytic polyether alcohols comprising reacting H-functional start substances containing at least one amino group which is catalytically active in the urethane reaction, and at least one group which is reactive toward alkylene oxides, with alkylene oxides comprising

a) dissolving the starter substance in a *solvent*

b) reacting the solution with alkylene oxides"

4. While the specification states that:

- **Paragraph [0013]**

As solvent, it is possible to use any organic solvents. In one embodiment of the process of the present invention, organic solvents which are chemically inert toward alkylene oxides are used as solvent.

- **Paragraph [0017]**

In a preferred embodiment of the process of the present invention, polyether alcohols are used as solvent. As polyether alcohols, preference is given to using the products which are known and customary for the production of polyurethanes. Preferred polyether alcohols have a functionality in the range from 2 to 8 and a hydroxyl number in the range from 20 to 1200 mg KOH/g.... preferably bifunctional to trifunctional polyether alcohols having a hydroxyl number in the range from... 20 to 100 mgKOH/g.

EXAMPLES 1a to 1f

The following is polyether prepared in accordance with the present invention:

Initiator - N,N-dimethylaminopropylamine

Organic Solvent - chlorobenzene or diglyme

Alkaline catalyst - Potassium hydroxide

Alkylene oxide - propylene oxide

EXAMPLES 3-7

The following is polyether prepared in accordance with the present invention:

Initiator - N,N-dimethylaminopropylamine or N,N-bis(3-dimethylaminopropyl)amino-2-propanolamine

Organic Solvent – Tri-functional polyether polyol - OH number of 25mgKOH/g

Alkaline catalyst - None

Alkylene oxide - propylene oxide and ethylene oxide

5. Case law holds that applicant's specification must be "commensurately enabling [regarding the scope of the claims]" *Ex parte Kung*, 17 USPQ2d 1545, 1547 (Bd. Pat. App. Inter. 1989) otherwise undue experimentation would be involved in determining how to practice and use applicant's invention. Although the statute itself does not use the phrase "undue experimentation", it has been interpreted to require that the claimed invention be enabled so that any person skilled in the art can make and use the invention without undue experimentation as stated in *Ex parte Forman*, 230 USPQ 546, 547 (Bd. Pat. App. Inter. 1986) and *In re Wands*, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988).

6. Specifically, *In re Wands* the Court set forth a non-exhaustive list of factors to be considered in determining whether undue experimentation would be involved in making and/or using the claimed invention. These factors include, but are not limited to : (a) the breadth of the claims; (b) the nature of the invention; (c) the state of the prior art; (d) the level of one of ordinary skill; (e) the level of predictability in the art; (f) the amount of direction provided by the inventor; (g) the existence of working examples; and (h) the quantity of experimentation needed to make or use the invention based on the content of the disclosure.

7. Applying these factors to claim 1, it is noted that the specification provides no direction or working examples (cf. factors (f) and (g)) for any solvent other organic solvents that do not react with alkylene oxide **or** polyether polyol preferably having a molecular weight of about 6,730 (Examples 3-7). Thus, the only portions of the specification that describe the polymer recited in claim 1 are paragraphs [0013] and [0017] and these paragraphs name only polyether polyol, or non-reactive organic solvent - not *any solvent*.

8. Furthermore, in view of the breadth of claim 1 (cf. factor (a)) which encompasses innumerable solvents, such additional low molecular weight initiators or water, all of which exhibit different reactivities and solubility parameters from the solvents listed in paragraphs 13 and 17, it is urged that the quantity of experimentation (cf. factor (h)) involved in order to reach a usable embodiment would be great. In light of the above factors, it is concluded that undue experimentation would be involved to make and use the invention as presently claimed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 11 is dependent on claim 9, which has been canceled - clarification is required.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

11. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

12. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. **Claims 1, 4, 6, 7, 8, 10, 11, 14-16, 19-21** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2, 3, 5-11 of copending Application No. 10/495,199. Although the conflicting claims are not identical, they are not patentably distinct from each other

14. **Regarding claims 1 and 10:** Claims 2 and 8 of application 10/495,199 teach polyether polyol and a method for its production comprising the alkoxylation of a low molecular weight initiator, such as diethylaminoethylamine. Although claims 2 and 8 fail to explicitly state that the resulting polyether is autocatalytic, based on the same initiator the resulting polyether would inherently exhibit such properties. Regarding the claimed "solvent" limitation, although not explicitly stated in claims 2 and 8 - it is commonly known in the art to use reactants as their own solvent - i.e. the initiator of 10/495,199 would behave as both initiator and solvent for other initiator + alkylene oxide.

15. **Regarding claims 4, 6, and 7:** Claim 8 teaches the alkoxylation can take place in the presence of catalyst, but fails to specify an alkaline catalyst.

16. Nevertheless, portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in the application defines an obvious variation of an invention claimed in the patent. *In re Vogel,* 422 F.2d 438, 441-42, 164 USPQ 619, 622 (CCPA 1970).

17. With this understanding, attention is drawn to the corresponding PG/Pub of application 10/495,199 (2005/0004403), which on paragraph 37 teaches the alkoxylation catalyst may comprise alkaline compounds.

18. **Regarding claim 8:** Although the claims of 10/495,199 fail to specify what type of alkylene oxide is used - as allowed by In re Vogel - paragraph 37 of PGPub 2005/0004403 teach ethylene oxide, propylene oxide, and butylene oxide.

19. **Regarding claim 11:** Claim 5 of application 10/495,199 teach polyurethane produced by reaction polyisocyanate with the relied upon polyether polyol.

20. **Regarding claim 14:** As discussed in paragraph 7 – herein incorporated by reference – the initiator would act as solvent and therefore it would have been obvious to utilize any ratio of solvent:initiator since they are one in the same.

21. **Regarding claim 15, 16, and 21:** Claim 2 of 10/495,199 lists diethylaminoethylamine – the same tertiary amine initiator of claim 1 – which would inherently exhibit catalytic properties.

22. **Regarding claim 19:** Although the claims of 10/495,199 fail to list the reaction temperature and pressure of the alkoxylation - as allowed by In re Vogel - paragraph 29 of PGPub 2005/0004403 teach pressures and temperature of 0.1 to 1.0 MPa and 80°C to 140°C.

23. **Regarding claim 20:** Claim 10 of application 10/495,199 states the reaction system is cooled after alkoxylation – this is taken to satisfy "after-reaction phase".

24. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

25. **Claims 1, 4, 6, 7, 8, 10, 11, 14-16, 19-21** are directed to an invention not patentably distinct from claims 2, 3, 5-11 of commonly assigned application No. 10/495,199. Specifically, see paragraphs 14-24 – herein incorporated by reference.

26. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned application 10/495,199, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

27. A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

28. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Obviousness Rejection I

29. **Claims 1-4, 6-8, 10-18, and 20-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Schilling et al ('759) in view of Waddington et al (2003/0100699).

30. **Regarding claims 1, 10, and 15:** Schilling et al teach a method for producing rigid polyurethane foam which is the reaction product of (A) polyisocyanate and (B) polyether polyol in the presence of tertiary amine catalyst (Col 5 lines 39-60).

31. Component (B) comprises a mixture of (Bi) polyether polyol and (Bii) polyether polyol, wherein (Bi) is produced by alkoxylating low molecular weight initiator with alkylene oxide in the presence of alkaline catalyst and (Bii) (Col 2 lines 24-40; col 3 lines 3-4, 53-57, 66-67). Important to note, the initiator is solid at room temperature and is dissolved in (Bii) - therefore (Bii) satisfies the solvent limitation of claim 1. While Schilling et al teach external tertiary amine catalyst is useful in the reaction of (A) and (B); there is no discussion of autocatalytic polyether or the initiators of claims 1 and 21.

32. Waddington et al also teach rigid polyurethane foam that is the reaction product of polyisocyanate and polyether polyol (Abstract; paragraphs 2, 4). The polyether polyol is

produced by alkoxylating hydroxyl and/or primary/secondary amine functional initiator with ethylene oxide and/or propylene oxide - the initiator preferably contains a tertiary amine compound (Paragraph 52). The tertiary amine containing initiator produces an autocatalytic polyether polyol that eliminates the need for external tertiary amine catalyst, thereby eliminating unwanted smells attributed to said catalyst (Paragraphs 15-17). Examples of suitable initiator are diethylaminoethylamine, diethylaminopropylamine, and N-(2-dimethylaminoethyl)-N-methylethanolamine (Abstract).

33. Therefore it would have been obvious to replace the initiator of Schilling et al with the autocatalytic initiator of Waddington et al since it produces polyether polyol that eliminates the need of bothersome external tertiary amine catalyst and it is suitable for the production of rigid polyurethane foam.

34. **Regarding claims 2 and 12:** (Bii) has a functionality and hydroxyl number as low as 4 and 300 mg/KOHg respectively. (Col 3 lines 4-6, 15-24).

35. **Regarding claims 3 and 13:** Schilling et al go on to teach that (Bii) may have a "lower functionality", which thereby controls the functionality of (Bi) - i.e. the functionality acts as a result effective variable. Hence, it would have been obvious to arrive at applicants claimed range since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch,* 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Furthermore, it should be noted that hydroxyl number is controlled in part by functionality; therefore it would have also been obvious to arrive at the claimed OH number since, based on its relationship with functionality, also acts as a result effective variable.

36. **Regarding claims 4 and 6:** Although the methodology of claim 4 is not explicitly disclosed by Schilling et al, (Bii) is also produced by alkoxylating a low molecular weight initiator in the presence of alkaline catalyst; as a result it would have been obvious to *not* remove said alkaline catalyst from (Bii) since it is also used in the production of (Bi) and eliminating a removal step increases the efficiency of the overall process.

37. **Regarding claim 7:** Example 1 teaches alkaline catalyst present by 1.7 wt% based on the total amount of H-functional starter substances - i.e. (Bii) + low molecular weight initiator.

38. **Regarding claim 8:** The alkylene oxide consists of ethylene, propylene, or butylene oxide (Col 3 lines 49-52).

39. **Regarding claims 11 and 20:** As discussed in paragraph 30, herein incorporated by reference, the polyether is useful in the production of polyurethane, which is taken to satisfy the "an after-reaction phrase" limitation.

40. **Regarding claim 14:** Schilling et al teach in example 1 that (Bii) is present relative to the initiator by a ratio of 1:3 and column 4 lines 37-44 explains that the ratio of (Bii):initiator controls the functionality of the resulting (Bi) compound – the ratio of (Bii):initiator is also a result effective variable. Thus, it would have been obvious to arrive at applicants claimed range since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch,* 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

41. **Regarding claims 16 and 21:** As discussed in paragraph 32, suitable initiators are diethylaminoethylamine, diethylaminopropylamine, and N-(2-dimethylaminoethyl)-N-methylethanolamine.

42. **Regarding claims 17 and 18:** The resulting molecular weight of (Bi) is simply controlled by the amount of alkylene oxide included in the reaction system and the molecular weight of the isocyanate-reactive species controls the rigidity of resulting polyurethane – the claimed ranges act as result effective variables. Therefore, it would be obvious to arrive at applicants' claimed ranges since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch,* 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Obviousness Rejection II

43. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Schilling et al ('759) in view of Waddington et al (2003/0100699) and in further view of Massen et al ('769).

44. **Regarding claim 5:** As discussed in paragraphs 30-33, herein incorporated by reference, Schilling et al in view of Waddington et al render obvious a method for producing autocatalytic polyether polyol, wherein the polyether is produced "without the need of large quantities of solvent" wherein suitable examples of such solvent are disclosed in Massen et al – such as toluene (Schilling et al: col 1 lines 15-18; col 2 lines 24-30; Madsen et al: col 3 lines 42-49). Therefore, it would have been obvious to arrive at the limitations of claim 5 since Schilling et al allow for solvent and Schilling et al directs the user's attention to Massen et al, which teach toluene as a suitable solvent.

Obviousness Rejection III

45. **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Schilling et al ('759) in view of Waddington et al (2003/0100699) and Hinz et al ('969).

46. **Regarding claim 19:** As discussed in paragraphs 30-33, herein incorporated by reference, Schilling et al in view of Waddington et al render obvious the production of autocatalytic polyether polyol, wherein said polyether polyol is produced by alkoxylating low molecular weight initiator in the presence of alkaline catalyst at a temperature less than 120°C, however, there is not discussion of the appropriate reaction pressure.

47. Hinz et al teach a method of autocatalytic polyether polyol that is useful in polyurethane (Abstract; col 11 lines 19-20). The polyether polyol is produced by alkoxylating a low molecular weight initiator compound with ethylene and/or propylene oxide in the presence of alkaline catalyst, wherein said initiator contains at least one tertiary amine group. (Col 1 lines 31-34; col 4 lines 1-10; col 5 lines 12, 15-16; examples 1 and 2). The alkoxylation takes place at temperatures between 100°C and 130°C and pressures ranging from atmospheric up to 20 bar (Col 5 lines 21-48).

48. Thus, it would have been obvious to arrive at the ranges of claim 19 since Hinz et al teach them as suitable reaction parameters in combination with reaction temperatures between 100°C to 130°C for the production of autocatalytic polyether polyol that is useful in the production of rigid polyurethane foam.

Response to Arguments

49. Applicant's arguments filed 4/6/2009 with respect to the rejection of claims 1-8, 10-21 have been considered but are not persuasive.

50. Firstly, applicants argue the claimed invention is patentable over the prior art since Schilling et al teach that the mixture of (Bi) and (Bii) is only a suspension and therefore (Bii) is not a solvent. In response, it is noted that Schilling et al refer to the mixture of (Bi) and (Bii) as a

suspension, however, applicants have ignored that it **may also be a solution** (emphasis added) (Col 3 line 57). Additionally, the fact that the initiator is initially solid shows it is the solute and (Bii) is the solvent. Also Schilling et al never excludes inert solvent but instead only requires that "large quantities" of it are avoided (Col 2 lines 24-30).

51. Applicants' position that the listed initiators are liquid at room temperature has not been supported by any factual data an appears to be an unsubstantiated opinion which cannot be substituted for fact. Furthermore, even if applicants establish that said initiators are liquid at room temperature, this would fail to overcome the current prima facie case of obviousness. As discussed in paragraphs 30-33, Waddington et al provide motivation as to why the relied upon initiators are preferred and if they are in fact liquid at room temperature would only further reinforce a reasonable expectation of success since their presence eliminates processing difficulties due to high viscosity of the reaction system.

52. Regarding applications' remarks concerning the currently claimed process being conducted at room temperature – there is nothing in claim 1 that requires said process to be performed at room temperature. In fact, claim 19 lists a reaction temperature between 80 and 140°C. Thus, this position is not persuasive since it is not commensurate in scope with claim 1.

53. It is noted that Waddington et al fail to teach the production of autocatalytic polyether in the presence of solvent, however had Waddington et al disclosed it, claim 1 would be rejected under 102(b) not 103(a). Furthermore, Waddington et al never exclude solvent and one of ordinary skill would have a reasonable expectation of success in substituting the initiators of Waddington et al in Schilling et al since they are both used to produce polyether under analogous reaction conditions i.e. temperature and in the presence of alkaline catalyst. Finally, contrary to

applicant's assertions regarding U.S. Patent 4,605,722 - Waddington et al never lists this as a teaching for the production of autocatalytic polyether. It is referred to as suitable methods for the production of tertiary amine containing initiator.

54. Finally, applicants' discussion of the unexpected advantage in control of molecular weight distribution and reduction in VOC content has been noted, however, the reduction in VOC is *not* unexpected. As discussed in paragraphs 30-33, it is commonly known to use the relied upon initiators in order to prevent unwanted odor caused by free tertiary amine catalyst. Second, applicants' examples fail to discuss any improvement in molecular weight distribution over non-tertiary amine containing initiator, therefore one cannot clearly establish that an advantage is unexpected or even exists.

55. Nevertheless, if applicants maintain that the claimed process provides an expected result in VOC content or molecular weight distribution, applicants' are reminded that superiority must pertain to the full extent of the subject matter being claimed. *In re Ackermann,* 170 USPQ 340; *In re Chupp* 2 USPQ2d 1437, 1440; *In re Murch,* 175 USPQ 89; *Ex Parte A,* 17 USPQ2d 1719. Accordingly, it has been held that to overcome a case of prima facie obviousness, a claim must be commensurate in scope with any showing of unexpected results. *In re Greenfield,* 197 USPQ 227. Therefore with this understanding and as previously discussed in advisory action mailed 2/10/2009, applicants' showings fail to over come the current prima facie case of obviousness since they are not commensurate in scope with the breadth of claim 1.

56. Additionally, it is noted that only a trend is required to establish an unexpected behavior of a claimed process or composition, still the fact remains that the examples need to be reasonably representative of the breadth encompassed by the independent claim - which the

current examples fail to do. Claim 1 does not list catalyst, type of alkylene oxide, or even specify what type of solvent - which in this case ranges from compounds such as toluene to polyether polyol.

Conclusion

57. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN J. GILLESPIE whose telephone number is (571)272-2472. The examiner can normally be reached on 8am-5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

58. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Benjamin J Gillespie/
Examiner, Art Unit 1796

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796